SECTION II.F

CONTINGENCY PLAN

Table of Contents

Drawings:

Evacuation Routes, B2-002-045002

Appendicies:
II.F-1 Emergency Equipment
II.F-2 Facility Emergency Coordinators List
II.F-3 External Distribution Cover Letter

1.0 General Information

The Contingency Plan (Plan) under RCRA and Part 111 of Act 451 is designed to ensure that the facility has resources available and has established the necessary planned procedures to follow in the event that an emergency situation occurs. This Plan is for The Dow Chemical Company (Dow), Michigan Operations - Midland, Salzburg Landfill (Landfill). It is designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous constituents to air, soil, or surface water at the facility.

The Salzburg Landfill is a licensed hazardous waste land disposal facility. The primary waste streams disposed at the Landfill consist of incinerator ash and remediation or corrective action materials. Currently only one disposal cell is open and operational; cells used previously have been closed according to regulations. A drawing is included with this Plan depicting the active, closed (capped), and future cells. The Landfill is operated by the Environmental Operations Department under the supervision of the Production Leader of Environmental Operations, located in 34 Building.

The Plan will be implemented whenever there is a fire, explosion, or release of hazardous waste constituents which could threaten human health or the environment at the facility.

2.0 Emergency Coordinator

The Facility Emergency Coordinator (FEC) has the authority to commit all the resources required to implement the Plan.

If an incident occurs at the facility, contact the Immediate Response Leader who will contact the Environmental Operations Supervisor on-call. If the incident requires that the Contingency Plan be activated, the supervisor on-call will serve as the FEC.

Name	Home Address	Work Phone
Immediate Response Leader	See on-call list (Appendix II.F-2)	636-4565 636-4198

The on-call list is found in Appendix II.F-2 of the Contingency Plan. The list of FEC names, home addresses, and phone numbers is found in the original signed copy of the operating license application provided to the MDEQ.

3.0 Implementation

The provisions of the Plan are to be carried out whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents, which could threaten human health or the environment. This Plan also presents methods for non-sudden releases. This section provides guidance for implementation.

Examples of situations, which may require implementation of the Contingency Plan, include:

1. A fire in the undeveloped facility area which could threaten human health or the environment.
2. A fire or explosion in the landfill cells which could threaten human health or the environment.
3. A spill of hazardous waste that occurs outside an active landfill cell area and in a location at the facility where the spill cannot be collected or contained, or has the potential to contact the perimeter runoff ditch system.
4. Significant concentrations of indicator compounds are detected in either the liner failure detection system or groundwater monitoring wells.

The Contingency Plan may be halted at any point during its implementation if it is determined that the situation is under control and no threat to human health or the environment exists. A decision to cease implementation of the Contingency Plan does not alter or affect Dow's obligation to otherwise properly manage any released hazardous waste or hazardous waste constituents.

4.0 Emergency Response Procedures

4.1 General

Upon discovering an emergency or imminent emergency, personnel will notify all operations and service people in the area using the area alert sirens, or radio communication in the event the alert sirens are disabled. The supervisor on-call will be notified that an emergency exists. The Dow Security Department will be notified that the emergency exists and the Fire Department and Emergency Van summoned to the site as necessary at the discretion of Dow Security or the FEC.

The FEC will implement the Contingency Plan by notifying the Dow Security Department to call the emergency contacts and request assistance and by initiating appropriate calls to governmental agencies.

The FEC will determine that all personnel in the area are accounted for, and that emergency aid is available. The identity, source, and amount of material involved, and the area affected by the emergency will be determined. The impact to human health and the environment is assessed along with the direct actions to be taken as necessary to minimize the effects of the emergency and bring the situation under control as quickly as possible. The FEC decides if Contingency Plan implementation is necessary and directs the Dow Security Department or other appropriate personnel to call contacts for assistance if their help is needed.

If the FEC determines that the facility has an emergency situation, which could threaten human health or the environment outside the facility, he/she will report the findings as follows:

1. Appropriate local authorities are notified that evacuation of local areas may be advisable. The FEC is available to help officials decide if evacuation is necessary, and
2. The government official designated as the on-scene coordinator for this geographical area or the National Response Center (800-424-8802) is notified. The report will include:

    1. Name and telephone number of reporter,
    2. Name and address of facility,
    3. Time and type of incident,
    4. Name and quantity of material(s) involved, to the extent known,
    5. Extent of injuries, if any, and
    6. Possible hazard to human health or the environment outside the facility.

During an emergency, the FEC will take all reasonable measures to ensure that fires, explosions and releases do not occur, recur or spread at the facility.

When the emergency situation is under control, the FEC directs containment and cleanup efforts, if necessary, to bring the situation to a safe conclusion.

4.2 Action Steps to Be Performed During Contingency Plan Implementation

The specific steps involved when implementing the Contingency Plan are:

1. Alarm or report by the person discovering an emergency to Dow Security and the supervisor at the facility or on-call. *It should be noted that merely sounding the alarm does not mean the Plan has been activated. This decision is consciously made by the FEC. The person discovering the emergency may communicate the emergency by activating the facility alert siren system, or by calling on the radio. Sirens are activated by using switches located in 3600 and 3602 buildings. The area has flashing lights that may be activated to keep personnel from entering the area.*
2. Dow Security activates the internal alert system inside the plant, if necessary. The internal alert system can consist of blue warning lights at selected high traffic areas or site-wide communications through the alert system.
3. FEC decides if Contingency Plan implementation is necessary and directs Security or other appropriate personnel to call contacts for assistance, as needed. The FEC will notify the local government authorities. Contacts are listed in this Plan, and include the appropriate government officials.
4. Further additional waste disposal activities in the affected facility will be halted until normal operations are restored.
5. If the emergency has or could impact human health or the environment outside the facility, the appropriate local government authority and/or the designated governmental on-scene coordinator are notified.
6. FEC directs response procedures to contain the emergency.
7. If cleanup operations are necessary, FEC ensures that material is recovered, if possible, and packaged for treatment and/or disposal. If necessary, the FEC will request outside cleanup assistance from HAZWOPER-trained contract employees.
8. The FEC ensures that the emergency equipment used has been readied for re-use and that no waste that may be incompatible with the released material is treated, stored or disposed of until cleanup procedure are complete.
9. The FEC must notify the EPA Region V Administrator, MDEQ and local officials that the facility is in compliance with the items listed in #8 above before resumption of normal operations.

10. Note in the operating record, located in 3600 Building, the date, time and details of the incident which required implementation of the Contingency Plan.
11. Provide written follow-up within 15 days after the incident to the Regional EPA Administrator and to the Chief of MDEQ Waste and Hazardous Materials Division. The report must include those items listed in 40 CFR 264.56 (j).

5.0 Contingency Plan Action Steps

In case the contingency plan is activated, these are the steps that should be followed:

1. Alarm or report by person discovering emergency;
2. Notify Dow Security by two-way radio, or by dialing 6-4400, 1-2-3 on a Dow phone, or 989-636-4400 on a non-Dow phone;
3. Notify Facility Emergency Coordinator (FEC);
4. Notify as needed:
    a. Dow Fire Department
    b. Site Emergency Manager
    c. Site Emergency Representative
    d. Dow Medical
    e. EHS On-Call
    f. Site Responsible Care Leader
    g. Dow Utilities Distribution
    h. Dow Industrial Hygiene
    i. Police & Sheriff
    j. City Fire Department
    k. Mid-Michigan Medical Center
    l. County Health Department
    m. City Water Department
    n. Consumers Energy
    o. County Emergency Services (Local Emergency Planning Committee (LEPC))
5. Determine need to implement Contingency Plan;
6. Initiate contact with governmental agencies (Immediate notification (during normal business hours to MDEQ-Waste & Hazardous Materials Division Director, otherwise PEAS) is required for fire or explosion;
7. Manage and steps to eliminate the emergency;
8. Manage cleanup of the area and equipment;
9. Note date, time and details in Operating Record; and

10. Provide written follow-up within 15 days to EPA/MDEQ.

5.1 Notification of Internal Contacts

The FEC or designee may call Dow Security, 989-636-4400, to initiate contact with any of the following applicable departments, as necessary. Dow Security has the current contact information for each of those departments. In some cases, a group pager is activated which contacts multiple people with one call. Dow Security is responsible to contact the people filling the following roles as needed:

Dow Fire Department, if applicable,
EH&S On-Call, if applicable,
Michigan Operations Site Emergency Manager, if applicable,
Utilities Distribution Services, if applicable,
Site Responsible Care Leader, if applicable,
Dow Medical Department, if applicable, and/or
EHS Delivery Leader/Specialist, if applicable.

5.2 Notification of External Contacts

The EH&S On-Call person, or their designee (FEC), may initiate contact with any of the following as necessary:

Michigan Department of Environmental Quality (PEAS)	800-292-4706
Saginaw Bay District Office	989-686-8025
Chief of Waste & Hazardous Materials Division	517-335-2690
U.S. EPA National Response Center	800-424-8802
U.S. Coast Guard, Detroit	313-568-9470
U.S. Environmental Protection Agency	313-676-6500

When notifying federal, state or local authorities, the following information will be provided:

1. Caller's name and telephone number,
2. Facility name and address,
3. Facility EPA identification number,
4. Name and quantity of material(s) involved, to extent known,
6. The extent of injuries, if any,

7. The possible hazards to human health, or the environment, outside the facility,
8. Weather conditions, (wind direction and speed), if a vapor is involved, and
9. The approximate area of affected location.

The following may be called by Dow Security, if appropriate:

Michigan State Police, Bay City	989-684-2234
Midland County Sheriff Department	911
Midland City Police Department	911
Midland City Fire Department	911
Midland County Emergency Services (LEPC)	911
Midland County LEPC (Non-emergency)	989-832-6750
Midland County Health Department	989-832-6679
Midland City Water Department	989-837-3515
Midland City Wastewater Treatment Plant	989-837-3500
Mid Michigan Medical Center, (Emergency)	989-839-3100
Consumers Energy	989-835-3769
Consumers Energy (Emergencies)	800-477-5050

6.0 Identification of Hazardous Wastes

The FEC identifies the character, source, amount and extent of any released hazardous waste or hazardous waste constituents.

For example, the most common waste streams disposed at the Landfill is incinerator ash and remediation or corrective action materials. Incinerator ash can be identified by referring to the bill of lading accompanying the shipment to determine the material in the vehicle and the vehicle capacity. Ash is typically gray to black in color, and generally has a uniform consistency and appearance. Remediation or corrective action materials typically consist of contaminated soil and debris.

In the case of other wastes disposed at the facility, information regarding the identification, quantity and properties can be obtained by referring to the uniform hazardous waste manifest or bill of lading accompanying the shipment, the waste characterization record on file (1561 Trailer), the generator, or by contacting facility supervision directly.

Should it be necessary to know the location and type of hazardous waste placed in a cell or cells, the FEC would refer to the operating log and engineering drawings that indicate the lift orientations. The information would indicate specific cell, lift and quantities of waste placed in a given cell.

7.0 Assessment of Potential Health and Environmental Effects

The FEC may obtain information to assess the waste by referring to the waste characterization records and other information on the health and environmental effects of the wastes involved. Input from EH&S On-Call, the expected duration of the emergency and meteorological information to assess the impact of the emergency can also be obtained.

The identified material is assessed for its properties and potential health or environmental effects. The location and size of the situation, containment and response capabilities, and the nature, type and construction of adjacent facility materials, structures and equipment are determined.

Action is taken to contain and mitigate the potential impact of the emergency. Additional action may be taken, as deemed necessary, to evacuate downwind areas, or notify public health agencies of such other actions that may be necessary to protect human health and the environment.

8.0 Control and Cleanup Procedures

8.1 Control Procedures

Fire and/or Explosions

In the event of a fire and/or explosion, the area is contained, and any fire extinguished. Any area contaminated by debris is barricaded and traffic is restricted until all debris is collected and the area is cleaned.

The area is readily accessible from the east and north, and emergency equipment can travel on interior roads.

Spills or Material Release

Material releases are controlled by erecting barricades, then intercepting, and collecting the material to minimize the affected area.

A material release may be contained by spreading sand or other material. The spilled material may be collected by vacuuming the material into trucks or other containers, or by loading it into dump trucks or other containers.

Run-off From Unloading Operations

Run-off is prevented by the leachate collection system, which is designed to handle the volume of rainwater generated from a 100-year storm. Only material that does not impede the flow of leachate is used for daily cover.

Loading operations are not conducted at the Landfill.

Floods

Because the berm along the Tittabawassee River bank exceeds the 100-year flood plain, the requirement for additional procedures to address this contingency is not required.

Prevention of Recurrence or Spread of Fires, Explosions, or Releases

In the event of a material release which could create a vapor explosion hazard, the release is contained and blanketed with a protein base foam, spread by the Dow Fire Department, to minimize the evolution of flammable vapors. If a material release could result in odor complaints from outside the facility, the foam would also be applied to minimize vapors.

8.2 Clean-up Procedures

Wastewater generated from a spill or from fire fighting is collected in either the facility leachate collection system, a temporary holding area constructed for the spill, or placed in tanks or containers for subsequent treatment and/or disposal.

Solid waste material is evaluated under Land Disposal Restrictions and either put into the Landfill facility or placed into containers and sent to The Dow Chemical Company, Michigan Operations, Midland location incineration facility or permitted long-term storage facility for subsequent disposal. Scrap metal resulting from an emergency situation at the Landfill is cleaned at the vehicle wash building (3601 Building) and recycled as scrap metal.

Water used to wash emergency equipment in 3601 Building is treated in the Michigan Operations, Midland location NPDES-permitted Waste Water Treatment Plant.

Separation Of Incompatible Waste During Implementation Of Contingency Plan

Waste materials that are incompatible are managed by the FEC in the following manner during plan implementation:

1. The facility waste characterization sheets are consulted to determine which waste materials are incompatible.
2. The facility operating log is consulted to see if any incompatible material(s), as determined in (1) above, are in the cells currently in operation.
3. Any material indicating compatibility or reactivity problems may be quarantined during an emergency by staging the material in a safe location.
4. Where necessary, temporary physical barriers, such as earthen dikes, may be constructed between staged, quarantined wastes, and any incompatible wastes with which it could possibly come in contact.

9.0 Emergency Equipment And Maintenance

9.1 Emergency Equipment List

Appendix II.F-1, of this Plan, contains the emergency equipment located at or available to the facility. The equipment listed may be changed due to modifications in The Dow Chemical Company, Michigan Operations, Midland location requirements. The appropriate tables are updated when changes occur.

9.2 Post-Emergency Equipment Maintenance Program

Facility Emergency Equipment

Heavy rolling and other equipment such as pumps, etc., used during emergencies are cleaned at 3601 Building.

Other emergency equipment maintained at the facility is listed in Appendix II.F-1. If used during the emergency, the fire extinguishers are recharged and replaced on their brackets. Absorbents are replaced to ensure there are appropriate quantities on hand.

Dow Fire Department Emergency Equipment

Equipment located at the Dow Fire Department or described as part of the rescue van equipment, is maintained, inspected, and cleaned by the Dow Fire Department on a routine basis. The Dow Fire Department completes the inspection for their emergency equipment.

The equipment is maintained in operating condition at all times in order to provide immediate emergency support to the facility and other operating areas in the Michigan Operations, Midland location.

Road and Yard Service and Division Stock Equipment

Any equipment obtained from either Road and Yard Service, or Division Stock, and used for emergency response at the facility, may also be used for other work in the Michigan Operations, Midland location. Prior to returning such equipment, the facility supervisor ensures that:

1. Rolling equipment is visibly clean of any residue resulting from the emergency;
2. Hand tools, pumps, hose and other small equipment which have been used have been rinsed clean with a suitable solvent or other cleanser, if necessary;
3. Monitoring equipment that has been used is wiped clean;
4. Personal protective equipment which has been used, and can be reused, is washed and sanitized, where appropriate, with a sterile solution; and
5. If self-contained breathing apparatus has been used during the emergency, the facility supervisor is responsible to ensure that spent air bottles are refilled.

It is the facility supervisor's responsibility to arrange for the repair or replacement of any equipment that has been damaged during the emergency.

Supplies and materials obtained from Division Stock or Road and Yard Service, which are depleted during the emergency, are restocked by the department which maintains the inventory.

Environmental Operations Emergency Equipment

Equipment located in other Environmental Operations areas, which may be used for emergency response at the Landfill, is washed after use and returned to the appropriate storage location.

Environmental Operations completes routine inspections of the emergency equipment as appropriate.

10.0 Coordination Agreements

Police Support

In the event of a facility emergency, the Michigan Operations, Midland location can request the support of Michigan State Police, Midland City Police or Midland County Sheriff for any of the following reasons:

1. The potential exists for impact upon the local community and an evacuation of the affected areas is necessary.
2. People who gather at critical locations on the facility perimeter can be in personal danger, or pose a danger by restricting facility access to crucial emergency equipment, supplies or personnel.
3. Specialized equipment or materials are needed that require special route clearances or traffic control to expedite delivery.

In such cases, the Michigan State Police, Midland County Sheriff Department and Midland City Police can provide off-site evacuation of affected areas of the community, barricades, crowd and traffic control, and escort for emergency equipment.

Medical Support

The Dow Medical Department has a full time medical staff consisting of full time physicians, emergency medical technicians (EMT's), and a trained nursing staff. Nurses, EMT's and physicians are on-site or available on-call for emergencies in the Michigan Operations, Midland location twenty-four hours per day, seven days per week.

In general, the Dow Medical Department evaluates all injuries to personnel and visitors in the Michigan Operations, Midland location. Acute chemical exposures and minor (non-fractures or vital organ penetrating) cases can be treated in-house. Severe injuries or occupational illnesses, which require hospitalization or treatment by specialists, are treated and transported to the Mid-Michigan Medical Center (MMMC), Midland, Michigan.

Dow Medical Department staff physicians are also full-time members of the MMMC staff with admitting privileges. In addition, the Dow Medical Department participates in training Dow Michigan Operations, Midland location EMT's, the Midland County paramedics and the family practice residents in the MMMC. Also, during practice emergency exercises, the Dow Medical Department staff coordinates closely with MMMC to monitor and treat injuries or exposures.

Should Dow Medical Department facility evacuation be necessary, the medical staff would regroup and continue to coordinate medical support activities from the MMMC.

Medical Emergency Vehicles

The Michigan Operations, Midland location has two ambulances for transporting individuals to the Dow Medical Department or the MMMC. In addition, Midland County has paramedics and the MMMC has ambulances on-call as needed.

Outside Fire Fighting Support

The Dow Fire Department is equipped and trained to handle all types of fires related to facility operations. Outside fire support, such as the Midland Fire Department, would be called upon only under circumstances where the Dow Incident Commander feels further fire fighting support is necessary, and such outside fire departments are appropriately trained. Such situations could include fires that have or could spread to additional facilities within the Michigan Operations, Midland location, or fires that have or could spread to areas outside the Michigan Operations, Midland location property. In all cases, the decision by the Dow Incident Commander to call in outside fire fighting support would depend upon the nature of the fire and the Dow Incident Commander’s knowledge of capabilities and limitations for such outside fire departments.

During practice emergency exercises, the Dow Fire Department works closely with the City of Midland Fire Department to monitor and evaluate fire fighting resources and responses to the practice emergencies.

Outside Hazardous Materials Support

The Midland Fire Department has approximately 25 fire fighters trained at the hazardous materials technician level. They may enter contaminated areas to perform rescues and are trained to take action to control or mitigate chemical releases. They are also part of the Tri-Cities Hazardous Materials Team and the Regional Response Team.

Midland County Emergency Services has a trailer and shelters for personnel decontamination. The trailer includes plumbing and water heaters. Supplies include temporary garments and disposal containers for contaminated clothing.

Procedures To Familiarize Local Outside Agencies With Contingency Plan

Environmental Operations annually reviews and revises the Contingency Plan both the Michigan Operations and the Salzburg landfill, as necessary. The current copy of the plan is issued to all local authorities listed below.

External Distribution Of Contingency Plan

A copy of the Contingency Plan distribution cover letter is included as Appendix IIF-3, and is issued to the following authorities:

Director of Emergency Services
Midland County Department of Emergency Services
220 W. Ellsworth Street
Midland, MI 48640

Chief of Fire Department
City of Midland
816 E. Haley Street
Midland, MI 48640

Waste and Hazardous Materials Division
Saginaw Bay District Office
Michigan Department of Environmental Quality
503 N. Euclid Avenue
Bay City, MI 48706

Division Chief
Waste and Hazardous Materials Division
Michigan Department of Environmental Quality
P.O. Box 30241
Lansing, MI 48909

Medical Director
Midland County Health Department
220 W. Ellsworth Street
Midland, MI 48640

11.0 Evacuation Plan

In the event of a major emergency, it may be necessary to evacuate a portion of the surrounding area. The FEC or Dow Emergency Services (in the coordinator's absence) is responsible for determining when an evacuation is necessary. Routes of evacuation from the Landfill are shown in the drawing included in this Plan.

The Michigan Operations, Midland location employs a siren system that rises and falls in pitch continuously to initiate evacuation of all plant areas. In addition to the alarm, a two-way radio system is used to notify key plant personnel of the nature of the emergency and recommended plan of action. Evacuations may be initiated by the FEC or Dow Emergency Services using the Michigan Operations, Midland location alert system.
In the event evacuation is called for, the following actions are taken:

1. The signal for evacuation is activated.
2. Dow Emergency Services will open the gates to Salzburg Landfill. No further entry of visitors, contractors or trucks is permitted unless they are involved in emergency response.
3. All personnel, visitors and contractors immediately leave through the nearest exit gate that is not downwind of a release.
4. No personnel remain or are allowed to re-enter the facility unless serving as the emergency response team. This normally includes only Dow Emergency Services and the FEC.
5. All personnel are accounted for. Supervision pre-designates gates as the safest exits for employees and alternate exits if the first choice is inaccessible.
6. Location of unaccounted personnel in emergency areas is not attempted unless the hazards are known and proper protective equipment is worn.
7. Re-entry into the emergency area is made only after clearance is given by the Facility Emergency Coordinator (FEC). At their direction, a signal or other notification is given for re-entry into the facility.

Drills are held to practice all of these procedures.

12.0 Evacuation Routes & Assembly Areas

1. **Evacuation Routes (See attached drawing)**

PRIMARY	
#90 Gate	• Main entrance to facility • Salzburg Road north of 3600 Building

ALTERNATES	
#91 Gate	• East of #90 gate on Salzburg Road • North-northeast of 3600 Building
#92 Gate	• Corner of Salzburg Road and Waldo Avenue (Ave.) • East-northeast of 3600 Building
#93 Gate	• On Waldo Ave. south of # 92 Gate and west of #96 Gate • East-southeast of 3600 Building
#96 Gate	• On Waldo Ave. south of #92 Gate and east of #93 Gate • East-southeast of 3600 Building
#78 Gate	• On CSX railroad tracks west of #96 Gate • Southeast of 3600 Building
#84 Gate	• On CSX railroad tracks southwest of #90 Gate • Southeast of 3600 Building
Bulldozer or other vehicle through the perimeter fence	This is an alternate exit from the site

2. **Evacuation Assembly Areas**

INTERNAL	
3600 Building	
EXTERNAL	
Primary	Across Salzburg Road, north of #90 Gate
Alternate	Corner of Salzburg Road and Waldo Avenue

13.0 Required Reports

As required by 40 CFR 264.56 (j), any emergency event that requires implementing the Plan is reported, in writing, within fifteen (15) days to the Chief of the Waste & Hazardous Materials Division, Michigan Department of Environmental Quality. The report will include:

1. Name, address and telephone number of owner/operator;
2. Name, address and telephone number of facility;
3. Date, time and type of incident;
4. Name and quantities of material(s) involved;
5. Extent of injuries, if any;

6. An assessment of actual or potential hazards to human health or the environment, where applicable; and
7. Estimated quantity and disposition of recovered material that resulted from the incident.

Reports may be sent to:

Michigan Department of Environmental Quality
Chief, Waste & Hazardous Materials Division
P.O. Box 30241
Lansing, MI 48909

14.0 Amendments

The Contingency Plan is reviewed and amended, if necessary, whenever:

1. The facility operating license is revised;
2. The plan fails in an emergency;
3. The facility changes in its design, construction, operation, maintenance or other circumstances in a way that materially increases the potential for fires, explosions or releases of hazardous waste or hazardous waste constituents;
4. Changes in response are necessary for an emergency situation;
5. The list of emergency coordinators changes; or
6. The list of emergency equipment changes.

Appendix II.F-1

Emergency Equipment

Appendix II.F-2

Facility Emergency Coordinators List

Appendix II.F-3

Letter to Emergency Response Agencies

Appendix II.F-4

Evacuation Routes

APPENDIX II.F-1
EMERGENCY EQUIPMENT
Salzburg Landfill – On-Site Equipment

ITEM	LOCATION	DESCRIPTION AND USE
Fire extinguishers	3600 Bldg, 3601 Bldg, 1563 Trailer, 3602 Building, 3606 Building	Extinguish incidental fires by trained and authorized personnel
Spill kits	3606 Building	Contain small liquid spills
Bulldozers	Active cells	Contain and manage volumes of solids and diking materials
Front end loader	Active cells	Contain and manage volumes of solids and diking materials
Sand pile	Landfill facility	Diking material
Personnel shower	3600 Building	Decontamination
Truck wash	Facility entrance	Decontamination
Emergency telephones	3600 Building, 3602 Building	Communication
Two-way radios	3600 Building, on the bulldozer	Communication
Alarms – audible	3600 Building, 34 Control Room	Emergency alarms
Alarms – pull stations	3600 Building, 3602 Building	Emergency alarms

Earthwork, Demolition and Excavation Equipment

ITEM	LOCATION	DESCRIPTION AND USE
Gradall	Road and Yard Services 921 Building	Four wheeled all terrain vehicle with ½ cubic yard (cu. yd.) bucket for digging trenches and general excavation
Bulldozer	Road and Yard Services 921 Building	Dual tracked vehicle with front blade for grading soil and fill. D-5 in Salzburg LF.
Dynahoe	Utilities Department 935 Building	Four wheeled vehicle with rear bucket for excavation down to 16' feet and front bucket.
Front end loaders	Road and Yard Services 921 Building Utilities Dept. 593 Building	Four wheeled vehicle with 1.75-4 cu. yd. overhead loaders bucket for filling trucks and short-distance hauling of material.
Road graders	Road and Yard Services 921 Building	Four-wheel all-terrain vehicle with scraping blade for grading soil and fill.

Fire Fighting Equipment

ITEM	LOCATION	DESCRIPTION AND USE
1000 gallon-per-minute (GPM) AFFF-Universal foam truck (with 1000 gallons (gal) of foam)	Dow Fire Department 1100 Building	Fire-fighting truck with a foam fire suppression system for fires involving organic liquid or polar solvents.
1000 GPM Mack Truck (with tank)	Dow Fire 1100 Building	Fire-fighting truck with water storage
1250 GPM Mack aerial truck	Dow Fire Department 1100 Building	Fire-fighting truck with bucket aerial extension (75 foot vertical)
1250 GPM National foam pumper/ emergency equipment truck w/ 500 gal AFFF-Universal Foam	Dow Fire Department 1100 Building	Fire fighting truck with a foam fire suppression system for organic liquid or polar solvent fires
20 pound dry chemical fire extinguisher (and other various sizes)	Emergency Equipment Truck 1100 Building	For small Type B and C fires
400 pound dry chemical system	Emergency Equipment Truck 1100 Building	For large Type B and C fires
500 gal. of AFFF-Universal Foam	1097 Building	Fire fighting foam for organic liquids and polar solvent fires
Fireman's ax	Emergency Equipment Truck 1100 Building	For use in emergency entrance to blocked areas in a building

Solid and Liquid Transportation Equipment

ITEM	LOCATION	DESCRIPTION AND USE
Water tanker	General Trucking 922 Building	2,500 gal. and 4,000 gal. trucks for hauling mildly corrosive brines and liquids
Dump trucks	Road and Yard Services 921 Building	10 and 15 cu. yd. capacity trucks for transporting solid materials
Pumper truck (IME)	Road and Yard Services 921 Building	Vacuum truck for liquids

Contractors may also provide a variety of solid and liquid hauling trucks, and other construction equipment, as needed.

Containers and Supplies Transportation Equipment

ITEM	LOCATION	DESCRIPTION AND USE
1250 GPM National foam pumper/emergency equipment Truck	Dow Fire Department 1100 Building	To deliver response personnel, equipment and supplies to an emergency
Trailer for boom equipment	Environmental Services 1012 Building	Trailer equipped with boom and floats for containing floating spills

Portable Power Sources and Lighting

ITEM	LOCATION	DESCRIPTION AND USE
Air compressors	Environmental Operations 1159 Buildings	These two units are portable and can provide equipment air supply, but not breathing air.
Emergency generator	Electrical Distribution Maintenance 1256 Building	Small generator is available on site, larger generators available through emergency contract service. (Coleman Electric 989-465-6115)
Emergency generator and lighting system permanently fixed to emergency equipment truck	Emergency Equipment Truck 1100 Building	5000 watt diesel generator with four 500 watt quartz floodlights
Emergency light plant	Electrical Distribution Maintenance 1018 Building	This unit will provide light for normal electrical hazard use.
Flash light	Emergency Equipment Truck 1100 Building	Standard use type
Portable gasoline-driven pumps	Environmental Operations 1159 Building	These pumps are for use with normal liquids

Hand Tools

ITEM	LOCATION	DESCRIPTION AND USE
Box of miscellaneous tools	Emergency Equipment Truck 1100 Building	Wrenches, pliers, sockets, and other tools for general use
Bung wrench	Emergency Equipment Truck 1100 Building	Opening drums
100 foot steel tape	Emergency Equipment Truck 1100 Building	Measuring
Levered pry bar	Emergency Equipment Truck 1100 Building	Prying open equipment
Pick ax	Emergency Equipment Truck 1100 Building	Digging demolition
Rubber mallet	Emergency Equipment Truck 1100 Building	Sealing drums, driving stakes
Set of sockets	Emergency Equipment Truck 1100 Building	General use
Shovels	Emergency Equipment Truck 1100 Building	Digging, placing absorbent
Sledge hammer	Emergency Equipment Truck 1100 Building	Small-size demolition
36" pipe wrench, aluminum	Emergency Equipment Truck 1100 Building	Plumbing work
36" pry bar, aluminum	Emergency Equipment Truck 1100 Building	Levering
24" pipe wrench, aluminum	Emergency Equipment Truck 1100 Building	Plumbing work

Miscellaneous Equipment

ITEM	LOCATION	DESCRIPTION AND USE
Boat, motor and trailer	Environmental Operations 1012 Building	For deployment of boom unit
Bomb tube	Emergency Equipment Truck 1100 Building	Safe movement of small, potentially explosive compounds
400-foot boom	Environmental Operations 1012 Building	Containing spills of liquids
Chains	Emergency Equipment Truck 1100 Building	For securing items for block and tackle or hauling
Hydraulic jacks	Emergency Equipment Truck 1100 Building	Power lifting short distances such as lifting a vehicle for tire change
Jumper cables	Emergency Equipment Truck 1100 Building	Emergency starts of 12-volt batteries
Miscellaneous mechanical tools and equipment	MI Operations Stock Department 492 Building	General demolition, construction and fabrication
Smoke ejector	Emergency Equipment Truck 1100 Building	High capacity air blower to remove smoky air
Various pumps	MI Operations Stock Department 492 Building	Submersibles and frame mounted centrifugal and positive displace-ment pumps for a variety of pumping needs

Miscellaneous Supplies

ITEM	LOCATION	DESCRIPTION AND USE
Assorted wooden blocks	Emergency Equipment Truck 1100 Building	Wedging and support
Bag of absorbent bead pads	Emergency Equipment Truck 1100 Building	Absorbing various small organic liquid spills, (not for oxidizers)
Box of rubber stoppers	Emergency Equipment Truck 1100 Building	General use
Box of sprinkler heads	Emergency Equipment Truck 1100 Building	Replace existing, used sprinkler heads
Absorbent spill kits	Environmental Operations 1012 Building	Absorb spilled material
Floats for boom	Environmental Operations 1012 Building	See boom above
Hazardous materials manual	Emergency Equipment Truck 1100 Building	Reference on chemical hazard properties and safety information
Nylon ropes	Emergency Equipment Truck 1100 Building	General use
Rolls of barricade tape	Emergency Equipment Truck 1100 Building	Barricading work area

Miscellaneous Supplies

ITEM	LOCATION	DESCRIPTION AND USE
Rope	Environmental Operations 1012 Building	General use protective gear
Wooden plugs	Emergency Equipment Truck 1100 Building	Stopping small leaks
Rain gear, boots and gloves	Environmental Operations 34 Building	General use
Zorb-All absorbent	Emergency Trailer 1100 Building	A pallet of 50 pound bags for general absorbing of spills
Sand	702, 779, and 1212 Buildings	Absorbent use

Personal Protective Equipment

ITEM	LOCATION	DESCRIPTION AND USE
Aluminized suits	Emergency Equipment Truck 1100 Building	Entry to high hazard or high temperature area
Bomb suits	1100 Building	Worn when handling potentially explosive materials
Bunker coats (Personal protective equipment (PPE)	Assigned to each responder 1100 Building	Worn when handling potentially explosive materials
Face shields	Emergency Equipment Truck 1100 Building	Worn to protect face from projectiles and splashing
Fully encapsulating Suits	Emergency Equipment Truck 1100 Building	Entry into corrosive environment
Hard hats	Emergency Equipment Truck 1100 Building	Head protection - worn during most construction, demolition or clean-up activities
Life jackets	Emergency Equipment Truck 1100 Building	Worn when in boat or around open water
Mono goggles	Emergency Equipment Truck 1100 Building	Vented goggles to protect eyes from direct splashes
Nitrile gloves	Environmental Operations 34 Building PPE Room	Hand protection from specific chemicals
Boots (Personal use PPE)	Emergency Equipment Truck 1100 Building	Foot protection

Personal Protective Equipment

ITEM	LOCATION	DESCRIPTION AND USE
Respirators	Emergency Equipment Truck 1100 Building	Variety of types of respirators
Rubber gloves	Emergency Equipment Truck 1100 Building	General hand protection
Saranex suits	Environmental Operations 34 Building PPE Room	Worn for protection from specific chemicals
Scott air bottles 2500 psi	Emergency Equipment Truck 1100 Building	Spare for 2500 psi Scott air pack
Scott air packs 2500 psi	Emergency Equipment Truck 1100 Building	SCBA for entry to certain hazardous breathing environments
Vessel entry mask	Emergency Equipment Truck 1100 Building	For self-contained breathing from central air supply

Monitoring and Communication Equipment

ITEM	LOCATION	DESCRIPTION AND USE
Explosimeter	Emergency Equipment Truck 1100 Building	Meter to detect presence and level of explosive vapors; measures in percent of lower explosive limit and % of O_2 in area
Portable radio	Emergency Equipment Truck 1100 Building	Monitor radio communications and broadcasts
Radiation detector	Security technical advisor's office 1100 Building	Meter to detect presence or absence of radiation
Radiation meter	Emergency equipment Truck 1100 Building	Meter to measure levels of radiation

Life Support and First Aid Equipment

ITEM	LOCATION	DESCRIPTION AND USE
Bag valve mask	Both Ambulances	Powered resuscitation equipment
Ambulances (2)	Dow Fire Department 1100 Building	Licensed and equipped Basic Ambulance per State of Michigan

APPENDIX II.F-2
Facility Emergency Coordinators List

Note: This list gives all persons qualified to act as the Facility Emergency Coordinator (FEC). The personnel on this list work on a rotation schedule that is subject to change. Please contact the Immediate Response Leader so the on-call person may be contacted.

Name	**Work Phone**
Immediate Response Leader	636-4198 636-4565

The list of FEC names, home addresses, and phone numbers is found in the original and current signed copy of the Contingency Plan provided to the MDEQ.